

Work Order ID 152289

152289

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Friday, October 21, 2016 3:03:41 PM

Item ID: D4071-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Shoulder Harness Assembly
 Start Date: 10/17/2016 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 11/4/2016 Req'd Qty: 4.00 *4* Customer:

Reference:
 Approvals: Process Plan: DAS 21 9-89 Date: OCT 26 2016 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4071	A								<u>DAS 13 9-89</u>
100		0.00							
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>34089</u>								
	Manufacture D4071-041 as per Dwg D4071								
	Supplier: AMSAFE INC.								
	Certificate of conformity is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.01							
Packaging									
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							
Quality Control									<u>DAS 38 9-89</u>

4 OCT 28 2016

4x SP16-11-21

4 NOV 22 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Work Order ID 152289

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Item ID: D4071-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Shoulder Harness Assembly
Start Date: 10/17/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 11/4/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Stacy</u>	0.00							
130									
Packaging	Memo	0.01							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.07							
Quality Control									

4 NOV 22 2016 DAS 6 9-89

16/11/22 AG

DAS
21
9-89

NOV 22 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Description Work Order Deviation				Disposition							

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Picklist Print

Friday, October 21, 2016 3:03:41 PM

Page 1

Work Order ID: 152289

152289

Parent Item: D4071-041

D4071-041

Parent Item Name: Shoulder Harness Assembly

Start Date: 10/17/2016

Required Date: 11/4/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A new issue DD 10.04.23 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

4147-2-041-2396

Purchased

No

110

Each

0.0000

1

4

4147-2-041-2396

Shoulder Harness, 4 Point

4X SP/6/11-21.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

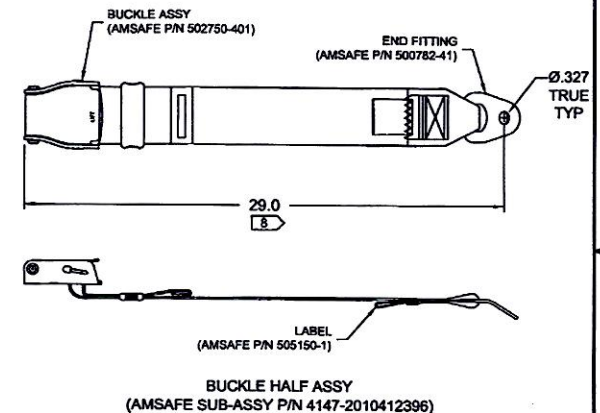
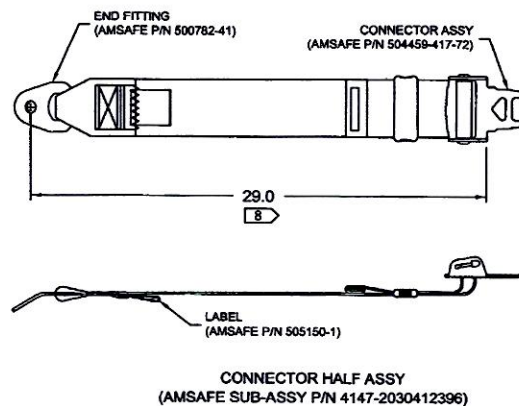
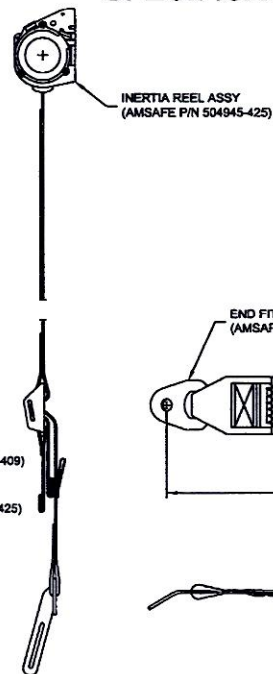
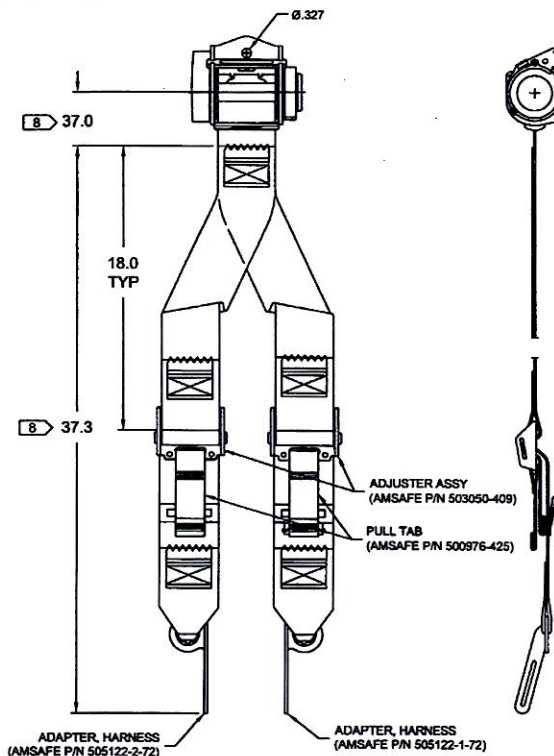
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

SPECIFICATION CONTROL DRAWING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 152289 MLS
16-10-26



D4071-041 SHOULDER HARNESS ASSY
SHOULDER HARNESS DETAIL
(AMSAFE SUB-ASSY P/N 4147-2070412396)

D4071-041 SHOULDER HARNESS ASSY
LAP BELTS DETAIL

RELEASED
2010-04-19

NOTES:

- 1) PURCHASE: AMSAFE INC. PART No. 4147-2-041-2396
4 POINT SHOULDER HARNESS.
MEETS REQUIREMENTS OF FAA TSO-C114
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 EXCEPT DIMENSIONS: X.X ±0.50
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LABEL TO CONTAIN THE FOLLOWING AT MINIMUM:
P/N 4147-2-041-2396
CUST P/N: D4071-041
DATE OF MFG
CONFORMS TO FAA TSO-C114
- 7) WEIGHT: 2.2 lbs
- 8) INDICATED DIMS ARE FULLY EXTENDED LENGTH.

A NEW ISSUE		JPH	10.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	JP	DRAWING NO.	REV. A
MFG. APPR.	N/A	D4071	SHEET 1 OF 1
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	SHOULDER HARNESS ASSY (D350-689) NTS	
DATE	10.04.13	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34089

Purchase Order Date 10/28/2016

PO Print Date 10/28/2016

Page Number 1 of 2

Order From :

AMSAFE INC.
1043 NORTH 47TH AVENUE
PHOENIX, AZ 85043
US

VU-AMS001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

OCT 28 2016

Contact Name

Vendor Phone 602 850 2850

Ship To Contact

Ship To Phone

Ship Via: FedEx Economy collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	4147-2-041-2396 AS PER DWG D4071 REV. A B152289 AMSAFE P/N: 4147-2-041-2396	Shoulder Harness, 4 Point	11/22/2016 Yes 11/22/2016		4.00 Each	\$359.69	\$1,438.76
						Line Total:	\$1,438.76
2	71401-45 Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality document	PROCUREMENT QUALITY CLAUSES	11/22/2016 No 11/22/2016		1.00	\$0.00	\$0.00

NOV 21 2016

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9-89**

Note:

10/28/2016

AmSafe

1043 NORTH 47th AVENUE
PHOENIX, AZ 85043
PH (602)850-2850 FAX (602)850-2812

SHIPPER/CERTIFICATION



CUSTOMER NO.
10006113

SALES ORDER NO.
S344528

BOL NO.
000431928

DATE PRINTED
11/16/16

PAGE NO.
1

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY
HAWKESBURY, ON K6A 1K7
Canada

DART AEROSPACE LTD.
1270 ABERDEEN ST
HAWKESBURY,, ON K6A 1K7
Canada

Ship to ID: 10006125

CUSTOMER ORDER NO.
PO34089

TERMS
NET30

FREIGHT
COLLECT

SHIP VIA
FedEx Intl Economy

F.O.B.
ORIGIN

Sales Order Remarks: 1517-9324-0

SHIPMENT REFERENCE 000431928

Remarks:

A004 - FAA-PMA/TSO ** ALL DART ORDERS SHOULD BE RETROFIT***
A005 - RIGHT OF ENTRY A007 FAI BY SELLER & MAINTAINED BY SELLER
A016 - PERSONAL QUALIFICATION
A026 - CERTIFICATION OF MATERIAL CONFORMANCE
A040 - NOTIFICATION OF QUALITY ESCAPE
A041 - QUALITY MANAGEMENT SYSTEM
A042 - DART NOTIFICATION BY SUPPLIER
A043 - RETENTION OF QUALITY DOCUMENT
~~DART HOLDS STC CERTIFICATE AND IS ALLOWED TO PURCHASE NON PMA PARTS~~

LINE	ITEM NUMBER / DESCRIPTION	DRAWING AND CERTIFICATIONS	DUE DATE	QTY ORDERED	QTY SHIPPED	QTY BACK ORDERED
1	Cust. Item No.: D4071-041 4147-2-041-2396 REST SYS ASSY W/IR	DRAWING: 4147 REV: L CERT: TSO-C114 Lot/Serial Numbers Shipped Quantity S344528-1 4.0	2016-11-22	4 Expire Ref.	4	0

SP1611-21

DAS
38
9-89

I certify that the article(s) listed above conform to all applicable design data, and (as applicable):

FAA PMA, FMVSS 209, FMVSS 302, 14 CFR 25.853

FAA TSO C22f, C22g, C114 or TSO Plus

The conditions and tests required for TSO approval of the article(s) are minimum performance standards. It is the responsibility of those installing the article(s) either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the standards applicable to the TSO article including (when applicable) the integrated non-TSO function. The non-TSO function is described as the seat belt airbag system including the inflator cable assembly and electrical components that have not been evaluated for functionality or installation requirements. TSO articles including the integrated non-TSO function must have separate approval for installation in an aircraft. The article(s) may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements. Product shipped meets all material, processing and test requirements. Certifications/Test reports as applicable are retained on file at AmSafe Aviation.

AmSafe Authorized Signature: X

Printed Name:

Erika Chavez
Erika Chavez

Date: NOV 16, 2016

COUNTRY OF ORIGIN USA

1. Approving Civil Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: S344528 - 1: <i>JM</i>	
4. Organization Name and Address: AmSafe, Inc. 1043 North 47th Avenue Phoenix, Arizona 85043		Cert. No. PT1967NM			5. Work order/Contract/Invoice Number: S344528 - 1 PAGES ATTACHED: 0	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	REST SYS ASSY W/IR	4147-2-041-2396	4	N/A	NEW	
12. Remarks: Drawing: 4147 Rev: L TSO: TSO-C114 DATE CODE: <u>A1116</u> CUSTOMER P/N: <u>D4071-041</u>						
EXPORT AIRWORTHINESS APPROVAL: THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF CANADA						
13a. Certifies the items identified above were manufactured in conformity to: ☒ Approved design data and are in a condition for safe operation ☐ Non-approved design data specified in Block 12.			14a. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature: <i>Jackeline Melchor</i>		13c. Approval/Authorization No.: ODA602112NM		14b. Authorized Signature		14c. Authorized/Certificate No.
13d. Name (typed or printed) JACKELINE MELCHOR		13e. Date (dd/mm/yyyy): 16/NOV/2016		14d. Names (typed or printed)		14e. Date (dd/mm/yyyy):
User/Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						



Material Burn Test Data and Report Record

For Horizontal Burn Test procedure Meets ASI Specification E503661 Rev F, FAR 25 853a
And Bell Helicopter Textron Test Specification 299-947-160 Rev D

1 0 Material

Part No 502396 Lot No 483602 Description BLACK
Rev Level I

2 0 Material Specimen Dimensions (inches)

	<u>Sample 1</u>	<u>Sample 2</u>	<u>Sample 3</u>
Length	13 00	13 00	13 00
Width	1 92	1 91	1 92
Thickness	0 05	0 05	0 05

3 0 Material Burn Rate Calculation

- 3 1 If the material does not ignite, the result is an immediate pass with an average burn rate of 0 00 in/min
- 3 2 In the event that the webbing does ignite but self-extinguishes before it reaches the 1 5 inch gauge line the result is passing
- 3 3 If the material does ignite and burn past the 1 5 inch gauge line but self-extinguishes prior to reaching the 11 5 inch gauge line within 4 minutes, the burn rate may be calculated by the following equation

$$\text{Burn Rate} = \frac{\text{Sample Length (in)} - \text{Material Remaining After Burn (in)} - 1 5(\text{in})}{\text{Total Burn Duration (min)} - \text{Time to reach 1 5in Gauge Line (min)}} = \frac{\text{Sample Length (in)} - L_r(\text{in}) - 1 5(\text{in})}{t_r - t_{1.5}}$$

Where

t_r = Time (in minutes) for flame to reach the 11 5 inch gauge line or to extinguish if past the 1 5 inch gauge line

L_r = Length (in inches) of material remaining after burning

$t_{1.5}$ = Time (in minutes) for flame front to cross the 1 5 inch gauge line

If the material does not extinguish before the 11 5 in gauge line within 4 minutes the burn rate may be calculated as follows

3 4

$$\text{Burn Rate} = \frac{\text{Sample Length (in)} - 1 5(\text{in})}{4(\text{min}) - \text{Time to reach 1 5in Gauge Line (min)}} = \frac{\text{Sample Length (in)} - 1 5(\text{in})}{t_r - t_{1.5}}$$

4 0 Results

Sample No	Flame Temp (>1550°F)	$t_{1.5}$ (Min)	t_r (Min)	L_r (in)	Burn Rate (in/min)	Note
1	1622	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED
2	1600	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED
3	1599	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED

Maximum allowable average burn rate 2 5 in/min

Average
Results 0 00
PASS

Technician Mansol C



Date July 29, 2016

When the part is smaller than 12 inches in length and the burn rate is less than 2 5 inches/minute but greater than 0 5 inches/minute For small or non webbing parts refer to Form A 135 Flammability Report for Non Webbing

Form A 142 Rev Oct 12



Material Burn Test Data and Report Record

For Horizontal Burn Test procedure Meets ASI Specification E503661 Rev F, FAR 25 853a
And Bell Helicopter Textron Test Specification 299-947-160 Rev D

1 0 Material

Part No 442302 Lot No 9C8684 Description BLACK 1"
Rev Level A

2 0 Material Specimen Dimensions (inches)

	Sample 1	Sample 2	Sample 3
Length	13 00	13 00	13 00
Width	1 00	0 99	1 00
Thickness	0 03	0 03	0 03

3 0 Material Burn Rate Calculation

- 3 1 If the material does not ignite, the result is an immediate pass with an average burn rate of 0 00 in/min
- 3 2 In the event that the webbing does ignite but self-extinguishes before it reaches the 1 5 inch gauge line the result is passing
- 3 3 If the material does ignite and burn past the 1 5 inch gauge line but self-extinguishes prior to reaching the 11 5 inch gauge line within 4 minutes the burn rate may be calculated by the following equation

$$\text{Burn Rate} = \frac{\text{Sample Length (in)} - \text{Material Remaining After Burn (in)} - 1 5(\text{in})}{\text{Total Burn Duration (min)} - \text{Time to reach 1 5in Gauge Line (min)}} = \frac{\text{Sample Length (in)} - L_r(\text{in}) - 1 5(\text{in})}{t_r - t_{1.5}}$$

Where

t_r = Time (in minutes) for flame to reach the 11 5 inch gauge line or to extinguish if past the 1 5 inch gauge line

L_r = Length (in inches) of material remaining after burning

$t_{1.5}$ = Time (in minutes) for flame front to cross the 1 5 inch gauge line

If the material does not extinguish before the 11 5 in gauge line within 4 minutes the burn rate may be calculated as follows

3 4

$$\text{Burn Rate} = \frac{\text{Sample Length (in)} - 1 5(\text{in})}{4(\text{min}) - \text{Time to reach 1 5in Gauge Line (min)}} = \frac{\text{Sample Length (in)} - 1 5(\text{in})}{t_r - t_{1.5}}$$

4 0 Results

Sample No	Flame Temp (>1550°F)	$t_{1.5}$ (Min)	t_r (Min)	L_r (in)	Burn Rate (in/min)	Note
1	1610	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED
2	1654	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED
3	1663	0 00	0 00	N/A	0 00	SELF-EXTINGUISHED

Maximum allowable average burn rate 2 5 in/min

Average
Results 0 00
PASS

Technician Mansol C



Date July 14, 2016

When the part is smaller than 12 inches in length and the burn rate is less than 2 5 inches/minute but greater than 0 5 inches/minute For small or non webbing parts refer to Form A 135 Flammability Report for Non Webbing

Form A 142 Rev Oct 12